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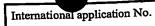


# **PCT**

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

| Applicant's or agent's file reference  | (ICI Attoloso                                       | See Notific  | ation of Transmittal of International   |  |  |  |
|--|---|--|---|--|--|--|
| P02-0031PCT  |   | OR FURTHER ACTION Preliminary Examination Report (Form PCT/IPEA/416) |   |  |  |  |
| nternational application No.   | International filing date (d<br>26 March 2003 (2    |  | Priority date (day/month/year) 28 March 2002 (28.03.2002)                               |  |  |  |
| PCT/JP2003/003669  | <u> </u>  |  | 20 1/11/22 2001 (2007)  |  |  |  |
| International Patent Classification (IPC) or national classification and IPC C08G 73/00, C08F 299/00 // C07C 231/02, 233/40, B82B 1/00, 3/00       |   |  |   |  |  |  |
|  |   |  |   |  |  |  |
| Applicant COMMUNICATIONS RESEARCH  | LABORATORY, INI                                     | DEPENDENT .  | ADMINISTRATIVE INSTITUTION  |  |  |  |
| This international preliminary exame and is transmitted to the applicant a   | nination report has been prepoceding to Article 36. | pared by this Intern   | national Preliminary Examining Authority  |  |  |  |
| 2. This REPORT consists of a total of  | 6 sheets, inc                                       | cluding this cover   | sheet.  |  |  |  |
|  | nied by ANNEXES, i.e., she                          | eets of the descript   | ion, claims and/or drawings which have been ations made before this Authority (see Rule |  |  |  |
| These annexes consist of a total of sheets.  |   |  |   |  |  |  |
| 3. This report contains indications relating to the following items:   |   |  |   |  |  |  |
| I Basis of the report  |   |  |   |  |  |  |
| II Priority  |   |  |   |  |  |  |
| III Non-establishmen   | t of opinion with regard to r                       | novelty, inventive   | step and industrial applicability   |  |  |  |
| IV Lack of unity of in   |   | 111  | :tive step or industrial applicability:   |  |  |  |
| V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial citations and explanations supporting such statement |   |  |   |  |  |  |
| VI Certain documents cited   |   |  |   |  |  |  |
| VII Certain defects in the international application   |   |  |   |  |  |  |
| VIII Certain observations on the international application   |   |  |   |  |  |  |
|  |   |  |   |  |  |  |
| Date of submission of the demand   |   | Date of completion of this report                                    |   |  |  |  |
| 28 October 2003 (28.   | 10.2003)  | 03 February 2004 (03.02.2004)  |   |  |  |  |
| Name and mailing address of the IPEA/J   | P   | Authorized officer   |   |  |  |  |
| Facsimile No.  |   | Telephone No.  |   |  |  |  |



## PCT/JP2003/003669

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

| pages  | Basis of     |  |   |  |
|--|--------------|--|---|--|
| the international application as originally filed the description:  pages  | . With re    | gard to  | the elements of the international application:*   |  |
| pages   1-4, 12-26, 28   , as originally file pages   5-11   , filed with the letter of   23 January 2004 (23.01.2004)   |              | he inter   | national application as originally filed  |  |
| pages   1-4, 12-26, 28   , as originally file pages   5-11   , filed with the letter of   23 January 2004 (23.01.2004)   | ⊠ t          | he desc  | ription:  | as originally filed  |
| pages   5-11   , filed with the letter of   23 January 2004 (23.01.2004)    the claims:  | <u> </u>     |  | 1 4 12 26 28  |  |
| the claims:    pages   | -            |  | 27  |  |
| pages  | -            |  | 5-11 , filed with the letter of   | 23 January 2004 (23.01.2004)   |
| pages  | $\nabla$     | 411  |   |  |
| pages  |              |  | 1.4.6.10  | , as originally filed  |
| pages 5, 11-36 , filed with the letter of 23 January 2004 (23.01.2004)  the drawings:  |              |  | , as amended (together  | r with any statement under Article 19  |
| the drawings:  pages  pages  , filed with the letter of  the sequence listing part of the description:  pages  pages  , filed with the letter of  the sequence listing part of the description:  pages  pages |              |  |   |  |
| the drawings:  pages  pages  , filed with the letter of  the sequence listing part of the description:  pages  pages  , filed with the letter of  the sequence listing part of the description:  pages  pages |              |  | 5, 11-36 , filed with the letter of _   | 23 January 2004 (23.01.2004)   |
| pages  |              | _  |   |  |
| pages  | $\boxtimes$  | the dra  | • • •   | , as originally filed  |
| the sequence listing part of the description:  pages p |              | -  |   | , filed with the demand  |
| the sequence listing part of the description:  pages p |              |  | filed with the letter of  |  |
| pages  |              | -  |   | · .  |
| pages  | ti           | he sequ  |   | as originally filed  |
| 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in we the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language   |              | pages  |   |  |
| 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in we the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language which the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  the language of publication of the international application (under Rule 48.3(b)).  the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 at or 55.3).  3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:  contained in the international application in written form.  filed together with the international application in computer readable form.  furnished subsequently to this Authority in written form.  The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in international application as filed has been furnished.  The statement that the information recorded in computer readable form is identical to the written sequence listing been furnished.  The amendments have resulted in the cancellation of:  the description, pages  |              | pages  | SILJ with the letter of   | ,  |
| the international application was filed, international application furnished to this Authority in the following language  the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  the language of publication of the international application (under Rule 48.3(b)).  the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 at or 55.3).  With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:  contained in the international application in written form.  filed together with the international application in computer readable form.  furnished subsequently to this Authority in computer readable form.  The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in international application as filed has been furnished.  The statement that the information recorded in computer readable form is identical to the written sequence listing been furnished.  The amendments have resulted in the cancellation of:  the description, pages  |              |  | , filed with the letter of  | 1:1  |
| The statement that the information recorded in computer readable form is identical to the written sequence instange been furnished.  4. The amendments have resulted in the cancellation of:  the description, pages   | the in These | the lather lathe | and application was fired, timess officially in the following language into the purposes of international search (under language of a translation furnished for the purposes of international search (under language of publication of the international application (under Rule 48.3(b)).  Inguage of the translation furnished for the purposes of international prelimina (a).  In any nucleotide and/or amino acid sequence disclosed in the international was carried out on the basis of the sequence listing:  In any nucleotide and/or amino acid sequence disclosed in the international was carried out on the basis of the sequence listing:  In any nucleotide and/or amino acid sequence disclosed in the international application in written form.  It together with the international application in computer readable form.  It is the subsequently to this Authority in computer readable form.  It is the subsequently to this Authority furnished written sequence listing does in the subsequently furnished written sequence listing does in the international application in computer readable form. | Rule 23.1(b)).  Ary examination (under Rule 55.2 and/ national application, the international  not go beyond the disclosure in the |
| the drawings, sheets/fig   | 4.           | beer The   | amendments have resulted in the cancellation of: the description, pages the claims, Nos the drawings, sheets/fig  |  |
| This report has been established as if (some of) the amendments had not been made, since they have been considered beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**  |              | ار bey   | and the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(9)).   |  |
| * Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are refer in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule and 70.17).  |              |  |   |  |
| and 70.17).  **Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.   | ** An        | y repla  | cement sheet containing such amendments must be referred to under item I and c  | ински то нь терога   |



### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/003669

| IV. Lack of unity of invention   |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| 1. In response to the invitation to restrict or pay additional fees the applicant has:   |  |  |  |  |  |  |
| restricted the claims.   |  |  |  |  |  |  |
| paid additional fees.  |  |  |  |  |  |  |
| paid additional fees under protest.  |  |  |  |  |  |  |
| neither restricted nor paid additional fees.   |  |  |  |  |  |  |
| 2. This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees. |  |  |  |  |  |  |
| 3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is   |  |  |  |  |  |  |
| complied with.   |  |  |  |  |  |  |
| not complied with for the following reasons:   |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| See supplemental sheet   |  |  |  |  |  |  |
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| <ol> <li>Consequently, the following parts of the international application were the subject of international preliminary examination<br/>in establishing this report:</li> </ol>          |  |  |  |  |  |  |
| all parts.   |  |  |  |  |  |  |
| the parts relating to claims Nos   |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Internation pplication No.
PCT/JP 03/03669

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV. 3.

Nanoparticles having a shell structure (claims 2-13, 23-29 and 34, and claims 1, 16-22 and 30-33 in as much as they refer to nanoparticles) and nanowires having a continuous structure (claims 14, 15, 35 and 36, and claims 1, 16-22 and 30-33 in as much as they refer to nanowires) are not considered to include the same special technical feature, and do not constitute a group of inventions so linked as to form a single general inventive concept. Therefore, these are different inventions and the number of inventions is two.

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

|          | <b>\</b>        |
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| Internat | application No. |
| PCT/JP   | 03/03669        |

| v. | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; |
|----|--|
|    | citations and explanations supporting such statement   |

| 1. Statement                  |        |          |       |
|-------------------------------|--------|----------|-------|
| Novelty (N)                   | Claims | 1-34, 36 | YES   |
|                               | Claims | 35       | NO NO |
| Inventive step (IS)           | Claims | 1-34, 36 | YES   |
| 2.022.03.05 (2.0)             | Claims | 35       | NO    |
| Industrial applicability (IA) | Claims | 1-36     | YES   |
|                               | Claims |          | NO NO |

### Citations and explanations

Document 1: JP 2000-063513 A (Toyo Ink Manufacturing Co., Ltd.), 29 February 2000

Document 2: EP 899286 A1 (Toyo Ink Manufacturing Co., Ltd.), 3 March 1999

The invention set forth in claim 35 is not novel over document 1.

Document 1 discloses a polyamine type dendromer which has unsaturated bonds, and indicates that this dendromer can be hardened by exposure to active energy radiation. It also mentions that a known photopolymer sensitizer can be added (paragraph [0049]).

The invention set forth in claim 35 is not novel over document 2.

Document 2 discloses a polyamine type dendromer which has unsaturated bonds, and indicates that this dendromer can be hardened by exposure to active energy radiation. It also mentions that a known photopolymer sensitizer can be added (paragraph [0100]).

The inventions set forth in claims 1-34 and 36 are not disclosed in any of the documents cited in the international search report, and are novel and involve an





|   | inven | tive  | step. | Specif | ically, | no | document | discloses | a |
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